

Notice of Allowability

Application No.

09/930,637

Examiner

Jack I. Berman

Applicant(s)

WASHEBECK ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the RCE filed on 19 October 2004.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ The drawings filed on 06 October 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date <u>10/6/03</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |


JACK BERMAN
PRIMARY EXAMINER

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An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Paul Donovan on November 15, 2004.

The application has been amended as follows:

IN THE CLAIMS:

1. (Currently Amended) A corona discharge device adapted to be used in conjunction with a printing press, the device comprising:
 - a cabinet housing an on-board power supply associated with a high voltage transformer;
 - a rear end plate depending from the cabinet;
 - a front end plate spaced apart in parallel relationship from the rear end plate and depending from the cabinet;
 - an electrode support tube fixedly mounted to the cabinet and having a corona electrode magazine slidably mounted on the support tube in parallel relationship thereto so as to be movable parallel therewith between an operative position and an inoperative position while remaining mounted on said electrode support tube, the magazine including a series of parallel corona electrodes;
 - a grounded treater roll rotatably mounted on a first shaft between the rear end plate and the front end plate and below the support tube; and

a pair of spaced idler rolls rotatably mounted on respective second and third shafts between the rear end plate and the front end plate below the treater roll such that a flexible web is guided upwardly by the idler rolls and wound about the treater roll beneath the electrodes.

2. (Original) The corona discharge device of claim 1, wherein the high voltage transformer includes a high voltage wire terminating in a high voltage connection for establishing a high voltage field between the electrodes and the treater roll.

3. (Original) The corona discharge device of claim 2, wherein the high voltage connection includes a pair of non-conductive spacers projecting rearwardly from the rear end plate, a connector plate joining the spacers, a spring loaded screw connected to the high voltage wire and extending forwardly from the connector plate, and a conductive bus bar connected to the rear end of the electrodes and engagable with the screw when the magazine is in the operative position.

4. (Original) The corona discharge device of claim 1, wherein a linear slide support is mounted between a bottom of the cabinet and a top of the support tube, the front end plate being slidably adjustable along the slide support and the first, second and third shafts to define a universal mounting device adapted to fit various frames of the printing press.

5. (Original) The corona discharge device of claim 1, wherein a grooved slide track is secured for slidable movement to opposing sides of the support tube, and a pair of slide rails is

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mounted on the magazine such that the rails align with the grooved slide tracks to slidably support the magazine on the support tube.

6. (Original) The corona discharge device of claim 1, wherein the front of the magazine includes a rotatable handle having a latch engagable with a suitable opening in the bottom of the support tube for holding the magazine in the operative position.

7. (Original) The corona discharge device of claim 1, wherein the magazine includes detent structure engagable with the support tube for preventing and permitting slidable removal of the magazine from the support tube.

8. (Original) The corona discharge device of claim 5, wherein the slide tracks include slot structure enabling the slide tracks when moved back and forth to simultaneously move up and down so that the magazine will be incrementally raised or lowered to enable adjustment of a gap between the treater roll and the magazine.

9. (Original) The corona discharge device of claim 8, wherein an adjustment device is mounted on a front of the support tube, the adjustable device including a rotatable knob having a rod tightly screw threaded into a cover plate on the support tube, whereby unscrewing of the knob will permit the slide tracks to move back and forth as well as up and down.

10. (Currently Amended) [In a] A corona discharge device for corona discharge treatment of continuous webs, the device having a front end plate and a rear end plate spaced from the front end plate in parallel relationship therewith, an electrode support tube mounted on the front end plate for supporting a corona electrode magazine having a series of corona electrodes associated with a high voltage source, the magazine being movable between an operative, web treating position and an inoperative, maintenance position while remaining mounted on said electrode support tube, a treater roll rotatably mounted between the front end plate and the rear end plate below the support tube and a pair of idler rolls rotatably mounted between the front end plate and the rear end plate below the treater roll such that a web to be treated is guided upwardly by the idler rolls and wound about the treater roll beneath the electrodes, [the improvement comprising:] a cabinet integrally associated with at least one of the front end plate and the rear end plate, the cabinet housing a power supply and an integral high voltage transformer provided with a high voltage wire joined in a high voltage connection to the electrodes for establishing a high voltage field between the treater roll and the electrodes.

11. (Currently Amended) [In a] A corona discharge device for corona discharge treatment of continuous webs, the device having a front end plate and a rear end plate spaced from the front end plate in parallel relationship therewith, an electrode support tube mounted on the front end plate for supporting a corona electrode magazine having a series of corona electrodes associated with a high voltage source, the magazine being movable between an operative, web treating position and an inoperative, maintenance position while remaining mounted on said electrode support tube, a treater roll rotatably mounted between the front end

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plate and the rear end plate below the support tube and a pair of idler rolls rotatably mounted between the front end plate and the rear end plate below the treater roll such that a web to be treated is guided upwardly by the idler rolls and wound about the treater roll beneath the electrodes, and a cabinet housing a power supply and an integral high voltage transformer provided with a high voltage wire joined in a high voltage connection to the electrodes for establishing a high voltage field between the treater roll and the electrodes, wherein the high voltage connection between the electrodes and the power supply enables the electrodes to be connected with the power supply when the electrode magazine is in the operative position in such a manner that the electrodes themselves are not handled or contacted, and permits disconnection of the electrodes from the power supply when the electrode magazine is in the inoperative position also in such a manner that the electrodes themselves are not handled or contacted.

12. (Previously Amended) In a corona discharge device for corona discharge treatment of continuous webs, the device having a front end plate and a rear end plate spaced from the front end plate in parallel relationship therewith, an electrode support tube mounted on the front end plate for supporting a corona electrode magazine having a series of corona electrodes associated with a high voltage source, the magazine movable between an operative, web treating position and an inoperative, maintenance position, a treater roll rotatably mounted between the front end plate and the rear end plate below the support tube and a pair of idler rolls rotatably mounted between the front end plate and the rear end plate below the treater roll such

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that a web to be treated is guided upwardly by the idler rolls and wound about the treater roll beneath the electrodes, the improvement comprising:

slidable structure enabling the electrode magazine to be slidably mounted on the support tube between an operative or web treating position and an inoperative or maintenance position, the slidable structure being adapted and configured in such a manner that the electrode magazine can remain mounted to the support tube when in both the operative or web treating position and the inoperative or maintenance position.

13. (Currently Amended) [In a] A corona discharge device for corona discharge treatment of continuous webs, the device having a front end plate and a rear end plate spaced from the front end plate in parallel relationship therewith, an electrode support tube mounted on the front end plate for supporting a corona electrode magazine having a series of corona electrodes associated with a high voltage source, the magazine being movable between an operative, web treating position and an inoperative, maintenance position while remaining mounted on said electrode support tube, a treater roll rotatably mounted between the front end plate and the rear end plate below the support tube and a pair of idler rolls rotatably mounted between the front end plate and the rear end plate below the treater roll such that a web to be treated is guided upwardly by the idler rolls and wound about the treater roll beneath the electrodes, [the improvement comprising:] an adjustable slide arrangement mounted on the support tube for enabling the front end plate to be slidably movable relative to support tube so that the front end plate defines a universal mounting plate adapted to be connected to various frames of a printing press.

14. (Currently Amended) [In a] A corona discharge device for corona discharge treatment of continuous webs, the device having a front end plate and a rear end plate spaced from the front end plate in parallel relationship therewith, an electrode support tube mounted on the front end plate for supporting a corona electrode magazine having a series of corona electrodes associated with a high voltage source, the magazine being movable between an operative, web treating position and an inoperative, maintenance position while remaining mounted on said electrode support tube, treater roll rotatably mounted between the front end plate and the rear end plate below the support tube and a pair of idler rolls rotatably mounted between the front end plate and the rear end plate below the treater roll, such that a web to be treated is guided upwardly by the idler rolls and wound about the treater roll beneath the electrodes, and a slide and slot arrangement between the support tube and the electrode magazine providing sliding movement of the electrode magazine relative to the support tube, and simultaneously permitting incremental raising and lowering of the electrode magazine relative to the support tube between two end positions to enable incremental adjustment of a gap between the treater roll and the magazine between the two end positions during at least the operative, web treating position.

15. (Previously Added) The corona discharge device of claim 11, wherein the high voltage connection includes a pair of non-conductive spacers projecting rearwardly from the rear end plate, a connector plate joining the spacers, a spring loaded screw connected to the high voltage wire and extending forwardly from the connector plate, and a conductive bus bar

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connected to the rear end of the electrodes and engagable with the screw when the magazine is in the operative position.

16. (Previously Added) The corona discharge device of claim 12, wherein a grooved slide track is secured for slidable movement to opposing sides of the support tube, and a pair of slide rails is mounted on the magazine such that the rails align with the grooved slide tracks to slidably support the magazine on the support tube.

17. (Previously Added) The corona discharge device of claim 12, wherein the magazine includes detent structure engagable with the support tube for preventing and permitting slidable removal of the magazine from the support tube.

18. (Previously Added) The corona discharge device of claim 13, wherein a linear slide support is mounted between a bottom of the cabinet and a top of the support tube, the front end plate being slidably adjustable along the slide support to define a universal mounting device adapted to fit various frames of a printing press.

19. (Previously Added) The corona discharge device of claim 14, wherein a grooved slide track is secured for slidable movement to opposing sides of the support tube, and a pair of slide rails is mounted on the magazine such that the rails align with the grooved slide tracks to slidably support the magazine on the support tube, and wherein the slide tracks include slot structure enabling the slide tracks when moved back and forth to simultaneously move up and

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down so that the magazine will be incrementally raised or lowered to enable adjustment of the gap between the treater roll and the magazine.

20. (Previously Added) The corona discharge device of claim 19, wherein an adjustment device is mounted on a front of the support tube, the adjustable device including a rotatable knob having a rod tightly screw threaded into a cover plate on the support tube, whereby unscrewing of the knob will permit the slide tracks to move back and forth as well as up and down.

The following is an examiner's statement of reasons for allowance: While slot 52 in the Bonner apparatus does permit the electrode magazine 12 to slide parallel to the support tube 14, this movement is permitted only as part of the process of removing the electrode magazine from the support tube. Nothing in the prior art teaches to slide the electrode magazine to an inoperative, maintenance position without removing it from the support tube.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack I. Berman whose telephone number is (571) 272-2468. The examiner can normally be reached on M-F (8:30-6:00) with every second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (571) 272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jack I. Berman
Primary Examiner
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jb
11/15/04